

**DEPARTMENT OF HOMELAND SECURITY CENTERS  
(DHS CENTERS) PROGRAM  
BROAD AGENCY ANNOUNCEMENT**



**Center for the Study of  
High Consequence Event Preparedness and  
Response**

**INTRODUCTION:**

This publication constitutes a Broad Agency Announcement (BAA) as contemplated in Federal Acquisition Regulation (FAR) 6.102(d) (2). A formal Request for Proposals (RFP), solicitation, and/or additional information regarding this announcement will not be issued.

The Office of Naval Research (ONR) will not issue paper copies of this announcement. The ONR reserves the right to select for award all some or none of the proposals in response to this announcement. The ONR reserves the right to fund all, some or none of the proposals received under this BAA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and cost proposals (or any other material) submitted in response to this BAA will not be returned. It is the policy of ONR to treat all proposals as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

The award will take the form of a grant.

## **I. GENERAL INFORMATION**

### **1. Agency Name -**

U.S. Department of Homeland Security  
University Programs  
Office of Research and Development  
Science and Technology Directorate  
Attn: [www.orau.gov/dhsuce5](http://www.orau.gov/dhsuce5)

### **2. Research Opportunity Title - DEPARTMENT OF HOMELAND SECURITY (DHS CENTERS) PROGRAM**

**ASSISTANCE:** This program is listed in the Catalog of Federal Domestic Assistance under 97.061, Centers for Homeland Security.

### **3. Program Name - Center for the Study of High Consequence Event Preparedness and Response**

### **4. Research Opportunity Number - BAA 05-008**

### **5. Response Date -**

Full Proposals: April 22, 2005, 4:00 p.m. EDT

### **6. Research Opportunity Description -**

The Department of Homeland Security (DHS) Center, in conjunction with previously established Centers, brings the intellectual capital of our higher educational institutions to bear on helping to ensure the security of the Nation. Accordingly, this Broad Agency Announcement (BAA) invites eligible institutions, partners, and groups of investigators to form consortia capable of mounting a sustained and innovative research and education effort in the specific area of the Study of High Consequence Event Preparedness and Response. Respondents to this BAA should be cognizant of the fact that the Science and Technology (S&T) Directorate of the Department of Homeland Security is a mission-driven program dealing with the security of the U.S., focusing on weapons of mass destruction, resultant disruptions and other possible effects. Consequently, outcomes derived from the research and education of this center should emphasize applications related to the organizational, technical and educational tools required to prepare for and respond to high consequence events, particularly those resulting from acts of terrorism. Further, approaches to develop the future intellectual capital and workforce necessary to respond to the challenges raised in this BAA should be broadly integrated across all lines of research.

**7. Contact:** Inquiries may be sent to: [universityprograms@dhs.gov](mailto:universityprograms@dhs.gov)

**8. Instrument Type(s) -**

The award will take the form of a grant.

**9. Catalog of Federal Domestic Assistance (CFDA) Numbers -**

This program is listed in the Catalog of Federal Domestic Assistance under 97.061, Centers for Homeland Security.

**10. Catalog of Federal Domestic Assistance (CFDA) Titles -**

Basic and Applied Scientific Research

**11. Other Information –**

**PART I—BACKGROUND AND PRIORITIES**

**A. Background and Legislative Authority**

The Department of Homeland Security (DHS) Science and Technology (S&T) Directorate's University Programs is soliciting to establish and operate a Center for the Study of High Consequence Event Preparedness and Response. The Center will perform research into preparation for disasters—high consequence events—with special emphasis on acts of terrorism. Its research will address the technical, systemic, behavioral, and organizational challenges such events pose. This Broad Agency Announcement (BAA) invites eligible institutions and groups of investigators to form consortia capable of creating and sustaining innovative research and education in emergency preparedness, principally against attacks using weapons of mass destruction (WMD). The Center will engage in mission-oriented research to significantly enhance the capabilities of first responders and others.

The Center for the Study of High Consequence Event Preparedness and Response will be an integral component of the Science and Technology Directorate's Centers of Excellence Program—a networked, integrated, university-based system that significantly contributes to the Department's mission to secure the United States against terrorism through research and education. These university-based Centers are established in accordance with the Homeland Security Act of 2002 (P.L. 107-296), as amended. The Centers are intended to provide and sustain the Nation's intellectual capital invested in preparation for and response to terrorism and other disasters, particularly those of high-consequence in nature.

The United States' preparation for, and response to, emergencies has historically been diverse and decentralized. The Nation depends upon trained, typically multidisciplinary organizations for search and rescue, for firefighting and emergency medical care, for hazardous material monitoring, and for the many other tasks that ensure

public safety. Emergency responders and incident managers belong to and serve both the private and public sectors. Within the public sector, their organizations reside at all levels of government: Federal, Tribal, state, and local. Their organizational range and the variety of skills and disciplines they represent can make it difficult for them to respond to a catastrophe in an effectively integrated and fully collaborative way. Our responders also face a changing and difficult to predict threat environment as well as new technologies—both technologies they must counter and those they use—that render their response preparation more challenging than ever.

One of DHS's critical missions is protection of the homeland from the catastrophic effects of Weapons of Mass Destruction (WMD.) In support of this mission, DHS S&T is establishing the Center for the Study of High Consequence Event Preparedness and Response to conduct innovative research and education that serve the goals of the Department of Homeland Security's National Response Plan (NRP):

- Integrating the current family of Federal domestic prevention, preparedness, response and recovery plans into a single all-discipline, all-hazards plan.
- Fostering cooperation at all levels of government, integration with the private sector and engagement with the public.

Local response teams and private citizens are a critical component in responding to large-scale disasters. Our first responders have immense experience dealing with wildfires, hurricanes, tornadoes, floods, and earthquakes, but disasters on this scale intentionally caused by terrorists—especially those armed with chemical, biological, radiological, or nuclear weapons—are a relatively new threat. The potential for large-scale destruction, surface and atmospheric contamination, and their attendant uncertainties will combine in novel ways, and our traditional approaches to incident response and management may prove inadequate.

## **B. Purpose and Priorities**

Under this BAA, DHS S&T solicits innovative research in the various disciplines that serve disaster preparedness. Through this Center, DHS S&T seeks to enhance the Nation's countermeasures against the catastrophic effects of weapons of mass destruction. We are particularly interested in such high-consequence terrorism precisely because of its unfamiliarity to both specialists and the general public. We have long experience dealing with floods, tornadoes, hurricanes, earthquakes, and wildfires. We have very little experience with weapons of mass destruction: there have been only two nuclear attacks in history (at the end of the Second World War), only one large-scale radiological accident (at Chernobyl), no massive biological attacks since the Second World War (in China), and only one modestly successful act of chemical terrorism (the Tokyo subway attacks). There are certainly useful analogues to be found in more familiar disasters, but the sparse historical record and the obvious impossibility of realistic full-scale experiment or rehearsal make research into high-consequence terrorist acts vitally important. Research that the Center sponsors is intended to redress gaps in our understanding of how best to prepare and respond. The Center is also expected to integrate education and research that involves postsecondary students and scholars and

develop innovative educational approaches--including multidisciplinary and interdisciplinary efforts--that would enhance the Center's research.

DHS is particularly interested in proposals that address what capabilities the responders will need in the future, and, more importantly, how those responders will achieve and maintain situational awareness, and how they will make sound and timely decisions. And since individual citizens are those immediately and ultimately affected by catastrophes, proposals should address the challenges and opportunities of individual emergency and disaster preparedness.

To better prepare the Nation for high consequence events, the Center for the Study of High Consequence Event Preparedness and Response should be able to sponsor multidisciplinary research and education efforts. The ability to foster development of innovative technologies is particularly important. It should be prepared to work collaboratively with other networked Department of Homeland Security Centers of Excellence. The Center's emphasis will be research and education focused on high consequence events. Its studies should address issues related to:

**Preparedness.** Studies will investigate the various categories of preparedness--government and first responder preparedness, community preparedness, national preparedness, and private sector preparedness--and how those categories can be measured quantitatively and qualitatively. How do these categories contribute to national net capacity? How do we prepare for threats to our homeland and their national security implications in our system of federalism and overlapping government responsibilities? How do we know when our country is prepared when conceptually preparedness is about more than the numbers of gas masks possessed and response plans drafted? How do we balance preparedness for both adaptive terrorist threats and non-adaptive natural disasters and emergencies? How much preparedness is enough in an ever-shifting threat environment? How do we assess it for citizens, governments, communities, businesses, information technology systems, and the various combinations of these entities? How do we balance the costs of preparedness against its presumed benefits, particularly for events that may or may not happen in a generation? How can we sustain preparedness for attacks or disasters that have a low probability but extremely high costs in loss of life and economic impact (the 9/11 attacks), or conversely high frequency, smaller scale attacks (the Israeli experience)? What relationship does preparedness bear to threat and vulnerability? How can innovatively designed response structures effectively unify incident command, and what types of unified command are truly desirable in an emergency? An understanding of human factors, especially including how responders interact with systems and technologies, should inform the design of an effective emergency response infrastructure.

**Prevention and deterrence.** What are the best ways of preventing and deterring a catastrophic terrorist attack or disaster? What combinations of vigilance, sensing, hardening, situational awareness, and information operations will best prevent or

dissuade terrorists from attacking? Can terrorists be deterred? Are different threats susceptible to different forms of deterrence? What new technologies are particularly suited to preventing or deterring events involving weapons of mass destruction?

**Decision-making.** We need to better understand how we make decisions before, during, and after high consequence events. What is the impact of such decisions? How do we make them, and will they accomplish what we want? The answers to these and similar questions require an understanding of what constitutes a high consequence event, and especially of the distinctive features of events involving weapons of mass destruction.

**Effective response networks.** Responding to major emergencies requires formation of networks often working outside traditional lines of communication. How will individuals and organizations come together to solve a large-scale homeland security crisis? What mix of traditional organizations and self-organizing networks will prove optimal? All such structures must be organic and resilient; they must facilitate surge capacity. Understanding how ephemeral response networks are generated and what makes them successful will help promote their formation and enhance their performance.

**Modeling and Simulation.** All emergencies are difficult to rehearse; catastrophes are impossible to rehearse. Prevention forms part of an overall preparedness strategy. How can modeling and simulation help us prepare in the absence of real life rehearsal? Hazard, economic, transportation and other modeling tools can help us better conduct cause-and-effect analyses, identify and select courses of actions, and apply appropriate resources. Our preparation for high consequence events necessarily depends upon reliable, accurate models. Training similarly depends upon realistic simulations. How do we know when and how a building will collapse? What can we predict about the behavior of contamination plumes? Our emergency responders will only find answers to these and similar questions through robust, validated models and simulations.

### **C. Examples of Outcomes and Deliverables**

The Department of Homeland Security is a mission-based agency. Thus proposals should address knowledge, tools, innovative technology development, models, and strategies that will enhance the Department's ability to accomplish its duty of preparing the Nation to deal with threats of catastrophic terrorism against the United States and other disasters. The examples of inquiries given in the previous paragraph are

illustrative and not exhaustive—successful proposals will offer approaches and deliverables beyond those described here.

**D. Descriptive Program Elements**

The Center should address the full spectrum of issues as outlined above, with a particular emphasis on preparedness. Application of the knowledge produced must principally serve the security of the United States against catastrophic terrorism, particularly terrorism involving weapons of mass destruction. Such knowledge may have broader application to the general challenges of disaster preparedness, but the Center's principal emphasis must remain on the distinctive challenges posed by terrorist attacks involving weapons of mass destruction. A comprehensive program of investigation, while emphasizing basic research (intended to increase our understanding of the phenomena relevant to emergency preparedness) should also recognize the importance of applied research (directed at immediate, short-term, and long-term applications).

**E. Educational Programs**

The Center's educational efforts should primarily address the Nation's continuing need for well-prepared and often highly specialized researchers. Postsecondary students and postdoctoral scholars at all levels should be fully integrated into the Center's research efforts. The Center should describe explicitly how the educational and research capabilities of Minority Serving Institutions (MSIs) will be incorporated. Proposals should address how the need for a sustainable pipeline of investigators and practitioners, well-versed in the multiple disciplines that contribute to emergency preparedness, will be met. They should also address the broader education of a well-informed and well-prepared public as well as the emergency responders' and incident managers' specialized needs, and should exhibit a familiarity with the training missions of agencies like the Office of Domestic Preparedness (ODP) and the Federal Emergency Management Agency (FEMA). The Center's educational mission and programs are intended neither to replace nor duplicate such efforts.

**F. Scope of Department of Homeland Security Centers of Excellence**

DHS Centers of Excellence are a centralized focal point for National Homeland Security efforts in their designated subject area, and must be prepared to fully cooperate with other Centers as well as with other elements of DHS and other relevant agencies. The Center for High Consequence Event Preparedness and Response will contribute to the national security as an individual Center of Excellence and as a member of the Integrated Network of Department of Homeland Security Centers of Excellence. As a member of the integrated network, the Center will collaborate with other DHS Centers in the areas of management, research, education and outreach with the intent of leveraging the synergism inherent in an integrated network approach.

The Center for High Consequence Events should be a consortium of institutions:

- with a proposed integration plan into the network of Department of Homeland Security Centers of Excellence;

- capable of effectively addressing all the programmatic research and educational elements elaborated above;
- adequately flexible in approach to accommodate new co-investigators and changes in direction as needed;
- that includes meaningful participation of individuals from underrepresented groups, Minority Serving Institutions, and institutions from EPSCoR states; and
- capable of holding conferences and workshops, accommodating short and long-term visitors, and sustaining a robust public outreach program.

**G. References**

1. Public Law 107-296, as amended (Homeland Security Act of 2002).
2. Homeland Security Presidential Directive 5 (HSPD-5).
3. Homeland Security Presidential Directive 8 (HSPD-8).
4. Department of Homeland Security National Response Plan ([http://nimsonline.com/download\\_center/index.htm#documents](http://nimsonline.com/download_center/index.htm#documents))

**II. AWARD INFORMATION**

Total Amount of Funding Available: \$15,000,000 (\$5,000,000 annually).

Anticipated Number of Awards: 1 award

Anticipated Period of Performance: 3 years

**III. ELIGIBILITY INFORMATION**

Proposals must be university-based and submitted by a U.S. academic institution that has the ability and capacity to conduct the required research. A single academic institution must be identified as the lead and the entity for proposal submission and subsequent discussions. A successful proposal will include a demonstrated partnership between the lead institution and higher educational institutions that include historically black colleges and universities (HBCUs) and/or other minority serving institutions (MSIs) and those institutions in EPSCoR states. Additional institutions associated with the lead institution will be subawards from the lead institution.

**IV. APPLICATION AND SUBMISSION INFORMATION**

**1. Application and Submission Process -**

Proposals submitted in response to this announcement should address the technology requirements and issues covered in this announcement. Each offeror should state in its proposal that it is submitted in response to BAA 05-008.

**2. Content and Format of Proposals**



The Proposal submissions will be protected from unauthorized disclosure in accordance with FAR 15.207, applicable law, and DoD/DoN regulations. Offerors are expected to appropriately mark each page of their submission that contains proprietary information.

**A. Electronic Address and Instructions to submit Letter of Intent/Proposal**  
Information about the electronic submission procedures for proposals may be found at: <http://www.ora.gov/dhsuce5>

**B. Content and Form of Letter of Intent**

A letter of intent to submit a proposal is **not** required. However, if an institution wishes to inform DHS of its intention to submit a proposal, the letter should include:

- Descriptive title of the proposal
- An abstract of the proposed effort
- Name, address, telephone and email of the Principal and Co-Investigator
- Name of Institution(s) participating in the proposal
- Names of key personnel

Although the Letter of Intent is not required, it provides information that will help DHS staff plan the review and estimate the review workload. It may be submitted on or before **February 18, 2005** to <http://www.ora.gov/dhsuce5>.

**C. Content and Form of Proposal Submission**

All proposals for University Programs, Science and Technology funding must be self-contained within specified page limitations. Internet web site addresses (URLs) may not be used to provide information necessary to the review because reviewers are under no obligation to view the Internet sites.

1. Proposal Guideline Preparation: Use the following guidelines to prepare a proposal. Proper preparation of a proposal will assist reviewers in evaluating the merits of each proposal in a systematic and consistent manner.

- Prepare the proposal on only one side of the page, single spaced using standard size (8 ½" x 11") white paper, one-inch margins, Times New Roman or Courier New, and a 12 point font. Although the proposal will be submitted electronically, when printed out, its pages must meet these standards.
- Number each page of the proposal sequentially, starting with the Table of Contents, including budget pages and any appendices.
- The contents of a proposal **must** be assembled in the following order:
  - Cover Sheet
  - Table of Contents

Proposal Summary  
Proposal Description  
Names of Principal Investigator and Other Key Personnel  
Budget  
Letters of Agreement (*See details below*)  
Assurances, if requested

2. Cover Sheet: The cover sheet should identify the lead university and its proposed Center/ Director as the Principal Investigator, as well as all major cooperating partners. It is essential during the formative period of the Center that the Directorship be a full-time position, and assurances from the university to this end are welcome.

3. Table of Contents: The Table of Contents should contain page numbers for each major component of the proposal.

4. Proposal Summary (up to 4 pages): The proposal summary must include: (1) the title of the proposal; (2) the names and contact information of the Principal Investigator (Director) and Co-PI from the lead institution; (3) a list of the major collaborating partner institutions with the name of the lead investigator from each; (4) an expanded list of participants and their affiliation; and (5) an informative abstract of the proposed research and education effort in sufficient detail so as to be appreciated independently of the main proposal. Other key elements should include specific research and education goals, a timeline for their achievement and dissemination, management structure, education plan, and explicit plans for each major cooperating partner in the proposed Center. The role of the Center in articulating and disseminating results should be addressed along with proposed approaches for collaboration with the existing Centers of Excellence.

5. Proposal Description (up to 50 pages): This section should include statements of work, planned approaches and expected timelines to attain stated goals. Further, since this description is the most important part of the proposal, particular attention should be paid to the following issues:

DHS has mission-oriented responsibilities; therefore the proposed research and education should be explicitly related to the DHS mission of ensuring security in the face of terrorist acts;

DHS concerns are Awareness, Anticipation, Prevention, Detection, Response, and Recovery;

It is the security of the U.S. that is paramount in this Center despite the concentration of terrorist activities outside of the Nation;

The Center will be prepared to be the Nation's focal point for Studies of High Consequence Events;

The collection of major collaborators and participating investigators must be of the highest quality, and encouragement is expected to involve

individuals (faculty, undergraduate and graduate students) from underrepresented groups;

The education program must be fully integrated with the research and adequately address the preparation of the graduates (including graduate students) to meet the future needs of Homeland Security;

Assurances must be provided that the research programs will meet the proposed tasks and time requirements, recognizing the special nature of university research; and

Participating investigators must be linked to each of the specific tasks.

(a) Management Plan: Collaborative multi-institutional proposals are encouraged in order to adequately cover the subject areas. A successful proposal will include individuals from underrepresented groups, higher education minority-serving institutions, and higher education institutions in EPSCoR States in the consortia. The offeror should identify each institutional unit contributing to the proposal and clearly define the roles and responsibilities of each unit. This section of the proposal should convincingly demonstrate that the proposed collaborative partnerships are adequately integrated and that the participating institutions fully support, through words and deeds, the serious time and resource commitment needed to ensure timely and meaningful progress toward a successful program in research as well as education. This demonstration should include describing linkages and communication approaches among the various units and a plan to identify and benefit from complementary activities and knowledge from all units. **Note:** Discussions and planning with the National laboratories must not take place prior to the Center award as these laboratories have insider information and receive separate funds from DHS. Following an award, the National laboratories can be expected to be a resource for the named Center. Also, the management plan may include regional and national partnerships with local, state, and national emergency response communities and other appropriate organizations and agencies.

(b) Education: The Nation needs to build the intellectual capital and workforce capacity at all levels for research, education and training in Homeland Security issues. This program element should describe how the Center will educate, train and mentor the next generation of scholars (undergraduate and graduate students) to meet the challenges in multidisciplinary sciences related to Homeland Security. DHS is particularly interested in models for sustainable programs in higher education whose curricula will address disciplines and subject areas likely to be of importance to Homeland Security. Sub-elements within this element include the integration of education and research across all aspects of the program, personal and professional skills development, internships, communication skills development and cross-disciplinary training. Also, of particular interest to DHS is recruitment, active involvement and mentoring, and eventual graduation of individuals from underrepresented groups.

(c) Equipment, Facilities and Databases: All facilities that are available for use or assignment to the proposal during the requested period of performance should be reported and described briefly. The offeror must outline its established procedures for arranging for human subject testing, including all reviews and appraisals to be obtained before any such testing would begin. Further, the protection of data relating to human subjects or groups must also be addressed. Any potentially hazardous materials, procedures, situations, or activities, whether or not directly related to a particular phase of the effort, must be explained fully, along with an outline of the precautions to be exercised. Examples include work that may put human subjects at risk. All major instrumentation available for use or assignment to the proposed effort should be itemized. In addition, new items of non-expendable equipment needed to conduct and bring the proposal to a successful conclusion should be listed, including their individual costs of acquisition. Justification must be provided if funds exceeding \$5K are requested for the acquisition of any particular capital equipment item.

(d) Proposal Timetable: The proposal should outline all important phases as a function of time, year by year, for the entire performance period, including periods beyond the grant funding period.

(e) Progress Reports: Annual progress reports will be required and more periodic updates are encouraged.

6. Principal Investigator and Other Key Personnel: It is essential, particularly during the formative period of the Center, that the Directorship be a dedicated, ideally full time position, and assurances from the university to this end are welcomed. Provide cogent descriptions of the relevant capabilities of each of the principal investigator and other key personnel. A two-page vitae of the principals and key personnel should be complete enough to show the necessary expertise to conduct the proposed work. For all other participants, up to 30 individuals, a 1-page description of each is allowed. Each description should include information sufficient to demonstrate that the key participating personnel possess training and expertise commensurate with their roles in the program. A short paragraph by each key person on his or her specific role in the proposed effort is necessary.

7. Budget: This section should describe a program funded for the first year at \$5,000,000. Also, it should include, for planning purposes, preliminary budget strategies for a second and third year at the same level. The current expectation is for a three year funding cycle, contingent on the availability of funds and on satisfactory performance in attaining stated goals, with the possibility of ongoing support beyond this period. Centers are encouraged to seek funding from additional sources that are consistent with the goals of the proposed effort.

(a) Budget Information Non-construction Programs: The proposal must include a budget for each year of support requested and a cumulative budget for the full 3 year term. Proposals must include budget information for each year using the OMB 424A form (links are provided on the following website at: <http://www.ornl.gov/dhsuce5>). The OMB 424A form has three sections: A, B, and C. A separate Section D is also required and explained under budget narrative and justification.

(b) Budget Narrative and Justification: All budget categories, with the exception of Indirect Costs, for which support is requested, must be individually listed (with costs) in the same order as the budget and justified. Instructions for Sections A, and B and C are included on the form. Instructions for Section D are as follows: Section D must provide an itemized budget breakdown for each year for each budget category listed in Sections A, B and C. Submit Section D as an Excel spreadsheet with an itemized listing of costs. For personnel, include a listing of percent effort for each year, as well as the cost. Section D should also include a breakdown of the fees to consultants, a listing of each piece of equipment to be acquired, itemization of supplies into separate categories, and itemization of travel requests (e.g., travel for data collection, conference travel, etc.) into separate categories. Itemize any other expenses by category and unit cost. The budget justification must provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the proposed effort. It must include the time commitments and brief descriptions of the responsibilities of key personnel. The budget justification should correspond to the itemized breakdown of costs that is provided in Section C. For consultants, the narrative should include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs. A justification for equipment purchase, supplies, travel and other related costs should also be provided in the budget narrative for each project outlined in Section C. For applications that include contracts for work conducted at collaborating institutions, offerors should submit an itemized budget spreadsheet for each contract for each project year, and the details of the contract costs should be included in the budget narrative. Proposal writers should use their institution's federal indirect cost rate and use the off-campus indirect cost rate where appropriate.

(c) Special Requirements: Offerors should budget for three (two-day) meetings each year with other Centers and DHS staff. Some of these meetings will include representatives from all the major participating institutions in the proposed consortium. Location of the meetings is unspecified.

8. Letter of Agreement: The offerors should include letters of agreement from all partners (e.g., schools) and consultants. Letters of agreement should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space and resources to the research project that will be required. These letters may be scanned, but each must be uploaded as a separate file.

9. Assurances Requested: (a) Use of Animals and Human Subjects in Research: If animals are to be utilized in the research effort proposed, the offerors must complete a DoD Animal Use Protocol with supporting documentation (copies of AAALAC accreditation and /or NIH assurance, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. Similarly, for any proposal that involves the experimental use of human subjects, the offerors must obtain approval from the offerors' committee for protection of human subjects (normally referred to as an Institutional Review Board, (IRB)). The offerors must also provide NIH (OHRP/DHHS) documentation of a Federal Wide Assurance that covers the proposed human subjects study. If the offerors does not have a Federal Wide Assurance, a DoD Single Project Assurance for that work must be completed prior to

award at: [http://www.onr.navy.mil/sci\\_tech/personnel/prop\\_format\\_instructions.asp](http://www.onr.navy.mil/sci_tech/personnel/prop_format_instructions.asp). (See Item N at this site for further information.

(b) Special information that is needed when experiments will be performed using recombinant DNA: proposals using recombinant DNA must include documentation of compliance with DHHS recombinant DNA regulations, approval of the Institutional Biosafety Committee (IBC), and copies of the DHHS Approval of the IBC letter.

**D. Submission Dates, Times and Place**

Verify instructions prior to submitting at: [www.ora.gov/dhsuce5](http://www.ora.gov/dhsuce5). Proposals must be received on or before **April 22, 2005** by 4:00pm EDT. Submit Proposals to: [www.ora.gov/dhsuce5](http://www.ora.gov/dhsuce5). Help desk email address is: [dhshep@ora.gov](mailto:dhshep@ora.gov) and the help desk phone number is: 865-576-6200.

**E. Funding Restrictions**

Funds awarded under this program may not be used for the renovation or refurbishment of research or education space; the purchase or installation of fixed equipment in such space; or the planning, repair, rehabilitation, acquisition, or construction of buildings or facilities.

**F. Other Submission Requirements**

In addition to OMB Form 424A, submit completed OMB Form 424 and OMB Form 424B. After filling out these forms, scan them, and include them with the electronic proposal submission.

**VOLUME 2: Cost Proposal**

The Cost Proposal shall consist of a cover page and two parts. Part 1 will provide a detailed cost breakdown of all costs by cost category by calendar or Gov't fiscal year, and Part 2 will provide a cost breakdown by task/sub-task corresponding to the task numbers in the proposed Statement of Work.

**Cover Page:** The use of the SF 1411 is optional. The words "Cost Proposal" should appear on the cover page in addition to the following information:

- BAA number
- Title of Proposal
- Identity of prime Offeror and complete list of subcontractors, if applicable
- Technical contact (name, address, phone/fax, electronic mail address)
- Administrative/business contact (name, address, phone/fax, electronic mail address) and
- Duration of effort (separately identify basic effort and any proposed options)

**Part 1:** Detailed breakdown of all costs by cost category by calendar or Gov't fiscal year:

- Direct Labor – Individual labor category or person, with associated labor hours and unburdened direct labor rates
- Indirect Costs – Fringe Benefits, Overhead, G&A, COM, etc. (Must show base amount and rate)
- Travel – Number of trips, destination, duration, etc.
- Subcontract – A cost proposal as detailed as the Offeror's cost proposal will be required to be submitted by the subcontractor. The subcontractor's cost proposal can be provided in a sealed envelope with the Offeror's cost proposal or will be requested from the subcontractor at a later date
- Consultant – Provide consultant agreement or other document which verifies the proposed loaded daily/hourly rate
- Materials should be specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a brief description of the Offeror's procurement method to be used (Competition, engineering estimate, market survey, etc.)
- Other Directs Costs, particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the contractor/recipient. (Justifications must be provided when Government funding for such items is sought). Include a brief description of the Offeror's procurement method to be used (Competition, engineering estimate, market survey, etc.)
- Fee/Profit including fee percentage.

**Part 2 :** Cost breakdown by task/sub-task using the same task numbers in the Statement of Work.

### 3. Significant Dates and Times -

| Schedule of Events *                |                                |
|-------------------------------------|--------------------------------|
| Event                               | Date                           |
| Full Proposals Due Date             | April 22, 2005// 4:00 p.m. EDT |
| Notification of Selection for Award | June 22, 2005                  |

### 4. Submission of Late Proposals –

Any proposal, modification, or revision, that is received at the designated Government office after the exact time specified for receipt of proposals is “late” and will not be considered unless it is received before award is made, the contracting officer determines that accepting the late proposal would not unduly delay the acquisition and

- If it was transmitted through an electronic commerce method authorized by the announcement, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

(b) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government's control prior to the time set for receipt of proposals; or

(c) It was the only proposal received.

However, a late modification of an otherwise timely and successful proposal, that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.

Acceptable evidence to establish the time or receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the Government office designated for receipt of proposals by the exact time specified in the announcement, and urgent Government requirements preclude amendment of the announcement closing date, the time specified for receipt of proposals will be deemed to extend to the same time of day specified in the announcement on the first work day on which normal Government processes resume.

The contracting officer must promptly notify any offeror if its proposal, modifications, or revision was received late and must inform the offeror whether its proposal will be considered.

## **5. Address for the Submission of Proposals –**

Submit Proposals to: <http://www.oraugov/dhsuce5>. Help desk email address is:

[dhshep@oraugov](mailto:dhshep@oraugov) and the help desk phone number is: 865-576-6200.

NOTE: PROPOSALS SENT BY FAX, HAND DELIVERED, OR E-MAIL WILL NOT BE CONSIDERED.

## **V. EVALUATION INFORMATION**

### **1. Evaluation Criteria –**

#### **A. General**

Proposals submitted to DHS, University Programs are always reviewed by panels (external and internal) composed of professional peers, who have been screened for conflicts of interest. In addition, panel reviews may be augmented by one or more reviews solicited by mail by the Program Officer and made available to the panel reviewers once they convene. As a general rule, and as based on deliberations, peer review panels are authorized to wholly or partially accept or reject any such mail reviews. Typically panel members are provided with only a



few of the proposals for which each reviewer is specifically tasked to read and report in detail during the meeting of the group. At minimum, there are two reviewers for each proposal. In all cases, however, copies of every proposal are available for inspection by all of the members of the external panel while it is in session. Each review and panel summary of the external review panel is reviewed and approved by the attending DHS official. In addition to this external review, DHS may conduct an internal review and a site review. The internal review by peer government personnel for relevancy may be used to augment the panel review. The final selection will be made by DHS officials based upon the proposal, the external peer review, internal review, Federal agency review, and a site visit. Any other materials, including external letters of support, are discouraged and **will not** be considered as part of the review process.

## **B. Evaluation Criteria for Scientific Merit**

The goals of the Department of Homeland Security Centers of Excellence program are to contribute to specific areas that leverage the multidisciplinary capabilities of universities filling gaps in knowledge, enhancing the Nation's ability to counter terrorist attacks and providing overall security of the Nation. Also, DHS envisions that the education plan addresses the need to prepare the next generation of diverse scholars, scientists and engineers to meet present and future challenges of Homeland Security. This should involve consideration of gender, race, ethnicity and economics.

Reviewers will be expected to assess the following aspects of an application in order to judge the likelihood that the proposed research and education will have a substantial impact on the theme of the program announcement.

### **Significance**

Does the proposal make a compelling case for the potential contribution to the solution of the problem(s) addressed in the BAA?

### **Research Plan**

Does the research plan meet the requirements described in the BAA sections:

Purpose and Priorities, Deliverables and Outcomes, and Program Elements?

### **Educational Plan**

Does the education plan address the objectives of producing well qualified graduates (undergraduate and graduate students) for disciplines affecting the future of the Homeland Security and is it well integrated at all levels with the research?

### **Management Plan**

Does the management plan convincingly demonstrate that the collaborative partnerships and linkages are truly integrated and diverse,

and meaningfully include minority-serving institutions in the access of research and education. Does the commitment of each partner show support for the implementation and success of the project?

### **Personnel**

Do the descriptions of the personnel make it apparent that the Principal Investigator and other key personnel possess the training, knowledge, experience and time commitment to competently implement the proposed research?

### **Resources**

Are the facilities, equipment, supplies, databases, and other resources to support the proposed activities adequate?

## **C. Conflicts of Interest and Confidentiality**

During the peer evaluation process, extreme care will be taken to prevent any actual or perceived conflicts of interest that will impact review or evaluation of the proposals. For the purpose of determining conflicts of interest, potential reviewers are asked to complete and sign conflicts of interest and nondisclosure forms.

Names of submitting institutions, partner institutions and participants, as well as application content and peer evaluations, will be kept confidential, except to those involved in the review process, to the extent permitted by law. In addition, the identities of peer reviewers will remain confidential. Therefore, the names of the reviewers will not be released.

## **VI. AWARD ADMINISTRATION INFORMATION**

### **AWARD ADMINISTRATION**

#### **General**

ONR will issue and administer the resulting grant award, under the procedures set forth in this BAA for University Programs, Office of Research and Development, DHS. The award of such grant is expected to be in compliance with the National Environmental Policy Act (NEPA), as determined by ONR prior to grant award.

#### **Award Decisions**

The following will also be considered in making the award decision:

- Scientific merit as determined by the external and internal peer review;

- Relevancy to the mission of DHS as determined by internal peer review;
- Contribution to the overall program of research and education as described in this BAA; and
- Availability of funds

**Inquiries may be sent to: [universityprograms@dhs.gov](mailto:universityprograms@dhs.gov)**

- CCR - Successful Offerors not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to award of any grant. Information on CCR registration is available at <http://www.onr.navy.mil>
- Certifications – Proposals should be accompanied by a completed certification package which can be accessed on the ONR Home Page at Contracts & Grants. The certification package is entitled, "[Certifications for Grants and Agreements](#) "

### **Reporting -**

The following deliverables, primarily in awardee format, are anticipated as necessary: Any additional deliverables proposed by each Offeror should be finalized with the awarding office before the grant is issued.

- Technical and Financial Progress Reports
- Monthly Progress Reports
- Presentation Material
- Other Documents or Reports
- Final Report

## **VII. OTHER INFORMATION**

### **1. Government Property/Government Furnished Equipment (GFE) and Facilities**

Each proposer must provide a very specific description of any equipment/hardware that it needs to acquire to perform the work. This description should indicate whether or not each particular piece of equipment/hardware will be included as part of a deliverable item under the resulting award. Also, this description should identify the component, nomenclature, and configuration of the equipment/hardware that it proposes to purchase for this effort. The purchase on a direct reimbursement basis of special test equipment or other equipment will be evaluated for allowability on a case-by-case basis. Maximum use of Government integration, test, and experiment facilities is encouraged in each of the Offeror's proposals.

Government research facilities and operational military units are available and should be considered as potential government furnished equipment/facilities. These facilities and resources are of high value and some are in constant demand by multiple programs. It is unlikely that all facilities would be used for the Total Ownership Cost Future Naval

Capability program. The use of these facilities and resources will be negotiated as the program unfolds. Offerors should explain which of these facilities they recommend.

## **2. Use of Animals and Human Subjects in Research**

If animals are to be utilized in the research effort proposed, the Offeror must complete a DoD Animal Use Protocol with supporting documentation (copies of AAALAC accreditation and /or NIH assurance, IACUC approval, research literature database searches, and the two most recent USDA inspection reports) prior to award. Similarly, for any proposal that involves the experimental use of human subjects, the Offeror must obtain approval from the Offeror's committee for protection of human subjects (normally referred to as an Institutional Review Board, (IRB)). The Offeror must also provide NIH (OHRP/DHHS) documentation of a Federal Wide Assurance that covers the proposed human subjects study. If the Offeror does not have a Federal Wide Assurance, a DoD Single Project Assurance for that work must be completed prior to award. Please see <http://www.onr.navy.mil/02/howto.htm> for further information.